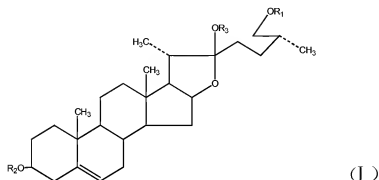


Listing of Claims:

1. (original) A steroidal saponins compound with the chemical structure of:

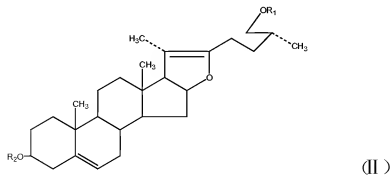


Wherein, $R_1 = \beta$ -D-glucose:

$R_2 =$ straight or bifurcate sugar chains including β -D-glucose, α -D-glucose, α -L-rhamnose, β -D-galactose, α -D-galactose, β -D-mannose, α -D-mannose, β -D-arabinose, α -D-arabinose, β -D-xylose, α -D-xylose, β -D-ribose, α -D-ribose, β -D-lyxose, α -D-lyxose, α -D-fucose, and 6-deoxysugars, and 2, 6-dideoxysugars corresponding to each of foresaid aldohexoses;

$R_3 = H$ or CH_3 .

2. (current amendment) A steroidal saponins compound with of claim 1, wherein the chemical structure ~~of~~ is:

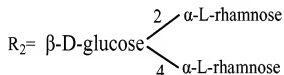


Wherein, ~~R₁ = β -D-glucose.~~

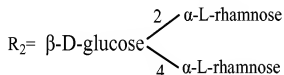
~~R₂ = straight or bifurcate sugar chains including β -D-glucose, α -D-glucose, α -L-rhamnose, β -D-galactose, α -D-galactose, β -D-mannose, α -D-mannose, β -D-arabinose, α -D-arabinose, β -D-xylose, α -D-xylose, β -D-ribose, α -D-ribose, β -D-lyxose, α -D-lyxose, α -D-fucose, and 6-deoxysugars, and 2, 6-dideoxysugars corresponding to each of foresaid aldohexoses;~~

~~R₃ = H or CH₃.~~

3. (current amendment) The steroidal saponins ~~as in~~ of claim 1 ~~or 2~~, wherein in the chemical structure (I) :



4. (new) The steroidal saponins of claim 2, wherein in the chemical structure (II) :



Claims 5-7 (canceled)

8. (new) The steroidal saponins of claim 1, wherein
Physicochemical parameters are:

White powder; mp 230-233°C (dec), $[\alpha]_{\text{D}}^{25}$ -88.7° (c:0.80
pyridine);

Shows positive reaction to Liebermann-Burchard, Molish and Ehrlich;

Glucose and rhamnose were detected by acid hydrolysis.

IR_{max}: 3400-3450 (OH), 2950, 1380, 1040 (glycosyl C-O);

FAB-MS: 1085 (M+Na)⁺, 1062 (M+H)⁺, 1031 (M+H-CH₃OH)⁺, 869 (M+H-CH₃OH -Glc)⁺, 723 (M+H-CH₃OH-Glc-Rha)⁺, 577 (M+H-CH₃OH-Glc-Rha×2)⁺, 415 (M+H-CH₃OH -Glc×2-Rha×2)⁺, 397 (M+H-CH₃OH-H₂O-Glc×2-Rha×2)⁺;

¹H-NMR (C₅D₅N) δ: 0.87 (3H, s, CH₃-18), 0.98 (3H, d, CH₃-27), 1.08 (3H, s, CH₃-19), 1.03 (3H, d, CH₃-21), 1.26 (3H, d, J=6.2Hz), 1.28 (3H, d, J=6.2Hz).

¹³C-NMR: data please see Table 2.

9. (new) The steroidal saponins of claim 2, wherein

Physicochemical parameters are:

White powder, mp 174-176°C (dec), [α]_D²⁵ -64.1° (c:0.003 pyridine);

Showed positive reaction to Liebermann-Burchard, Molish and Ehrlich;

Glucose and rhamnose were detected by acid hydrolysis;

IR_{max}: 3420 (OH), 2940 (CH), 1645, 1450, 1375, 1335, 1225, 1115, 1070, 1045, 920, 890. ESI-MS: 1053 (M+Na)⁺, 1029 (M-H)⁻, 883 (M-H- 146)⁻, 737 (M-H- 146×2)⁻;

¹H-NMR (C₅D₅N) δ: 0.72 (3H, s, CH₃-18), 1.01 (3H, d, J= 6.6Hz, CH₃-27), 1.05 (3H, s, CH₃-19), 1.63 (3H, s, CH₃-21), 1.62 (3H, d, J=6.0Hz), 1.76 (3H, d, J=6.3Hz), 4.83 (1H, d,

J=7.5Hz), 4.94 (1H, d, J=6.6Hz), 5.32 (1H, brs, H-6),
5.85 (1H, s), 6.39 (1H, s)'

¹³C-NMR: data please see Table 1:

10. (new) A method for producing the steroidal saponins compound of claim 1, wherein comprising the steps of:

- 1) extracting fresh rhizome of *Discorea nipponica* with 80% ethanol by heating refluxing; then concentrating the extracted liquid and suspending the extract in water to get dissolved portion and unsolved portion;
- 2) passing the dissolved portion through D101 absorbent resin column, and eluting by distilled water first, then by 10%, 50% and 95% ethanol in order;
- 3) concentrating the 50% ethanol eluted solution, and subjecting to silica gel column chromatography with granularity of 45~75um, then eluting by CH₃Cl, CH₃OH and H₂O mixture solution in ratio of 8 : 2.5 : 0.01, and methanol step by step; vaporizing and concentrating the eluted solution under decreased pressure, and incorporating the crystals of component fractions of 46~50, then re- crystallizing the crystals to get MPD compound.

11. (new) A method for producing the steroidal saponins compound of claim 2, wherein comprising the steps of:

- 1) extracting rhizome of *Discorea futschauensis* with 75% ethanol by heating refluxing, then concentrating the extract solution, and suspending the extract in 3000ml water;

2) extracting the suspending solution by 3000ml water and 3000ml n-butanol for twice, and subjecting the concentrated n-butanol extract to silica gel column chromatography with granularity of 45~75um; then eluting by CH₂Cl, CH₃OH and H₂O mixture solution in ratio of 8:2.0:0.1 and methanol step by step;

3) vaporizing and concentrating the eluted solution under decreased pressure, and incorporate the distillate of 8~17, and subjecting to ODS column chromatography; then eluting by methanol and H₂O mixture solutions in ratio of 1:1, 65:35 and 80:20 step by step, collecting the fraction eluted by 65% methanol and preparing by Rp-18 HPLC with 70% methanol, and then collecting the chromatography peak at 40 min; drying the collection under reduced pressure to get PPD compound.

12. (new) The application of steroidal saponins compound for curing the diseases miocardial infarction, coronary artery disease, heart angina, arrhythmia, blood losing of cardiac muscle, hypertension, hyperlipaemia and ropy blood.

13. (new) The application of steroidal saponins compound of claim 12, wherein said steroidal saponins is MethylProtodioscin (MPD).

14. (new) The application of steroidal saponins compounds of claim 12, wherein said steroidal saponins compounds is Pseudoprotodioscin (PPD).

15. (new) The application of steroidal saponins compounds of claim 12, wherein said steroidal saponins compounds is a composition of MethylProtodioscin (MPD) and Pseudoprotodioscin (PPD) .